

Appl. No. 10/687, 443

Amdt. Dated June 12, 2006

Reply to Office Action of February 15, 2006

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REMARKS

This is a full and timely response to the non-final Office Action mailed August 28, 2006. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1-25 are pending in this application, with Claims 1, 7, 12, and 15 being the independent claims. Claims 1, 7, 9, 11, and 15 have been amended. No new matter is believed to have been added.

Claim Objections

The Examiner objected to claims 9-11 because of the following informalities: the term "circuits" in claim 9, line 2 should be replaced with -- circuit -- ; and the term "system" in claim 11, line 3 should be replaced with -- apparatus --. The Examiner also required appropriate correction.

Claims 9 and 11 have been appropriately amended.

Rejections Under 35 U.S.C. § 112

The Examiner rejected claims 1-14 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner stated that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The Examiner specified that in independent claims 1, 7, and 12, the limitations "such that the one or more of the radios is operable via the other PTT switches," "such that the selected radio transmitter is operable via the other PTT switches," and "without disabling the one or more radio transmitters" were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Examiner also stated that the specification does disclose that the status of *other* PTT

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switches and radios are not affected; however, this is different from what is being claimed, since the one or more radios claimed are the ones previously selected (i.e., not "other" radios).

Applicant respectfully submits that the limitations recited above (i.e., where the one or more radios claimed are the ones previously selected) are supported by the specification as filed. Paragraphs 0025-0028 (pages 11-13) describe, in conjunction with Figure 4, an embodiment in which two PTT switches are used to operate a single transceiver (TRANSCVR) or radio.

In the example described, the same radio that is activated by one PTT switch is available for use by another PTT switch when the first PTT switch becomes stuck. If the outcome of query 222 is YES then step 224 is performed wherein the alarm is turned ON, the timer is reset, PTT1 is disabled, that is, rendered ineffective, and the corresponding transceiver is switched from the transmit state back to the receive state (Paragraph 0027).

If the outcome of query 214 is NO, then step 226 is executed wherein an alarm is turned off and PTT1 is enabled (Paragraph 0028). Query 228 is then executed wherein it is determined whether or not PTT2 is active (Paragraph 0028). If the outcome of query 228 is YES then query 230 is executed wherein it is determined whether or not PTT2 is capable of working (Paragraph 0028). If the outcome of query 230 is YES the step 232 is executed wherein the timer is started and the selected radio is put into transmit mode (Paragraph 0028).

Therefore, the limitations recited above in claims 1, 7, and 12 are support by the specification as filed. Claims 2-6, 8-11, 13, and 14 are dependent on either claim 1, claims 7, or claim 12 and should be allowable for at least the same reasons as claims 1, 7, and 12 stated above.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claims 1-14 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

The Examiner rejected claims 7-11 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

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which Applicant regards as the invention.

The Examiner stated that claim 7 recites the limitation "the other PTT switches" and that there is insufficient antecedent basis for this limitation since only one PTT switch is claimed before.

Claim 7 has been appropriately amended and now recites "other PTT switches." Claims 8-11 are dependent on claim 7 and should be allowable for at least the same reasons as claim 7 stated above.

Applicant, accordingly, respectfully requests withdrawal of the rejections under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

#### Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 12-14 under 35 U.S.C. § 102(b) as being anticipated by Arndt.

Claim 12 has been amended to include deselecting a stuck PTT switch without affecting the activity of other PTT switches available to be coupled to the radio transmitters and such that the radio transmitters remain operable via the other PTT switches. Specifically, claim 12 includes the limitation "inhibiting the signal representative of the position of the PTT switch that is in the STUCK-ON condition from being received by each radio transmitter without affecting the activity of other PTT switches available to be coupled to the one or more radio transmitters and such that the one or more radio transmitters remain operable via the other PTT switches."

Arndt discloses a system for preventing channel blockage on aircraft voice communications frequencies (Abstract). As shown in Figure 1, the system 10 includes transmitter circuitry 12 and receiver circuitry 14. A relay 16 is used as a controlled switching element for selectively activating and deactivating parts of the transmitter circuitry 12 and receiver circuitry 14 depending upon whether one is transmitting or receiving at a particular time. (column 6, lines 27-36) The relay 16 is ordinarily operated directly by a push-to-talk switch 18 on a push-to-talk line 20. Upon depressing the switch 18, the relay 16 is ordinarily operated so that the transmitter circuitry 12 may transmit

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voice communication through a microphone (not shown) connected to the transmitter. Release of the switch 18 normally causes the relay 16 to end transmission. (column 6, lines 41-48)

An anti-blocking controlled switch 22 is used in series between the relay 16 and the push-to-talk switch 18. Assuming that the transistor switch 22 is closed, operation of the push-to-talk switch 18 controls the relay 16 in the usual manner. However, the present invention causes the opening of the switch 22 under certain condition in order to inhibit the relay 16 from responding to the push-to-talk switch 18. (column 6, lines 49-56). A step-off circuit 26 is used to prevent the pilot or radio operator of system 10 from "stepping-on" a transmission of someone else. (column 7, lines 4-6) The step-off circuit generates an occupied signal when gate 32 indicates the presence of a transmission having the requisite tone under 300 Hertz on a particular radio channel. (column 7, lines 30-33) A stuck mic circuit 40 is connected as shown to the push-to-talk switch 18 and generates a stuck signal when it detects a condition corresponding to a possible stuck microphone. (column 7, lines 52-55).

The stuck and occupied signals are both applied to a logic circuit 42. The logic circuit 42 generates an inhibit signal when either of the occupied or stuck signals or both the occupied and stuck signals are present. The inhibit signal is supplied to the control terminal of the switch 22, in order to open the switch. Upon opening of the semiconductor switch 22, the relay 16 will be maintained in the receive position. (column 7, lines 56-64)

As such, if either the radio channel is occupied or a stuck PTT condition is detected, the radio will be held in a receive mode and not be available for use. Thus, not only does Arndt not disclose deselecting a PTT switch such that the radio transmitters remain operable via other PTT switches, but Arndt teaches away from such a limitation by deactivating the radio whenever the channel is occupied by another user.

Therefore, claim 12 is not anticipated by Arndt because claim 12 includes a limitation that is not disclosed by Arndt.

Claims 13 and 14 are dependent on claim 12 and should be allowable for at least the same reasons as claim 12 stated above.

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Applicant, accordingly, respectfully requests withdrawal of the rejections of claims 12-14 under 35 U.S.C. §102(b) as being anticipated by Arndt.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1, 3-7, 11, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Arndt in view of Corrigan.

Claims 1, 7, and 15 include deselecting a stuck PTT switch without affecting the activity of other PTT switches available to be coupled to the radio transmitters and such that the radio transmitters remain operable via the other PTT switches. Specifically, claim 1 includes the limitation "when a PTT switch is stuck in the ON position, to deselect the stuck PTT switch without affecting the activity of other PTT switches available to be coupled to the plurality of the radios such that the one or more of the radios is operable via the other PTT switches." Claim 7 includes the limitation "when the STUCK-ON condition occurs, ignore the PTT switch ON/OFF signal and place the selected radio transmitter in STANDBY without affecting the activity of other PTT switches available to be coupled to the selected radio transmitter such that the selected radio transmitter is operable via other PTT switches." Claim 15 includes the limitation "when a PTT switch is stuck in the ON position, to deselect the stuck PTT switch without affecting the activity of the other PTT switches and such that one or more radios available to be coupled to the plurality of PTT switches remains operable via the other PTT switches."

As discussed above, Arndt does not disclose, and actually teaches away from, deselecting a stuck PTT switch without affecting the activity of other PTT switches available to be coupled to the radio transmitters and such that the radio transmitters remain operable via the other PTT switches.

Corrigan teaches a control system for ensuring that a radio transceiver cannot be left in the transmit mode (Abstract). As shown in Figure 1, the apparatus includes a transmitter circuit 4, a receiver circuit 5, and a transmit-enable circuit 3 (page 2, line 35-page 3, line 1) In the transmit mode, the current through the resistor R41 increases, thus increasing the voltage differential across the differential amplifier 44, which leads to

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current flowing through line 22, thereby operating the warning light 400 (page 4, lines 12-21). If, after a predetermined time period, transmission is still detected, a fault is indicated. The device reacts to this condition by removing the electrical power supply to at least the transmitting section of the radio, thereby clearing the channel from its blocking signal (page 5, lines 19-24). Thus, Corrigan teaches removing power from a transmitter if the switch is stuck for a predetermined amount of time, at which point it may not be used by any switch. Specifically, Corrigan does not teach deselecting a stuck PTT switch without affecting the activity of other PTT switches available to be coupled to the radio transmitters and such that the radio transmitters remain operable via the other PTT switches.

Therefore, claims 1, 7, and 15 are patentable over Arndt and Corrigan because claims 1, 7, and 15 include limitations that are not taught or suggested, and actually taught away from, by the combination of Arndt and Corrigan.

Claims 3-6 and 11 are dependent on either claim 1 or claim 7 and should be allowable for the same reasons as claims 1 and 7 stated above.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claims 1, 3-7, 11, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Arndt in view of Corrigan.

The Examiner rejected claims 2 and 8-10 under 35 U.S.C. § 103(a) as being unpatentable over Arndt in combination with Corrigan as applied to claims 1 and 7 above, and further in view of Clark.

Claims 2 and 8-10 are dependent on claim 1 and should be allowable for at least the same reasons as claim 1 stated above.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claims 2 and 8-10 under 35 U.S.C. § 103(a) as being unpatentable over Arndt in combination with Corrigan as applied to claims 1 and 7 above, and further in view of Clark.

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Conclusion

Based on the above, independent claims 1, 7, 12, and 15 are patentable over the citations of record. The dependent claims are also submitted to be patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

Dated: 11/28/06

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